

WHAT IS CLAIMED IS:-

1. A printhead assembly, comprising:

at least one printhead module comprising at least two printhead integrated circuits, each of which has nozzles formed therein for delivering printing fluid onto the surface of print media, a support member supporting and carrying the printing fluid for the at least two printhead integrated circuits, and an electrical connector for connecting electrical signals to the at least two printhead integrated circuits;

drive electronics arranged to control the printing operation of at least one of the at least two printhead integrated circuits via the electrical connector;

a casing comprising a support frame on which the at least one printhead module and a plurality of mounting elements mounting the drive electronics are removably arranged;

a first connector arrangement at one end of the support frame connecting the drive electronics and printhead integrated circuits to a power supply and a data input; and

a second connector arrangement at the other end of the support frame spring loading the plurality of mounting elements in the direction of the first connector arrangement.

2. A printhead assembly according to claim 1, wherein:

the drive electronics incorporates at least one controller arranged on at least one first printed circuit board for controlling the printing operation of the at least one of the printhead integrated circuits, the at least one first printed circuit board being removably mounted to at least one of the mounting elements;

the first connector arrangement is a second printed circuit board and the second connector arrangement is a third printed circuit board; and

the at least one first printed circuit board is engaged at the one end of the support frame by the second printed board and is engaged at the other end of the support frame by a spring portion formed in the third printed circuit board.

3. A printhead assembly according to claim 2, wherein the third printed circuit board comprises termination connections for terminating a data signal traversing the at least one first printed circuit board from the second printed circuit board.

4. A printhead system according to claim 3, wherein the second printed circuit board carries a power terminal for connecting with the power supply and a data terminal for connecting with the data input.

5. A printhead system according to claim 4, further comprising a plurality of longitudinally extending electrical conductors connected to the second printed circuit board for delivering the power from the power supply to the drive electronics and printhead integrated circuits via the electrical connector.

6. A printhead system according to claim 4, wherein the third printed circuit board carries a power terminal for connecting with the power supply.
7. A printhead system according to claim 6, further comprising a plurality of longitudinally extending electrical conductors arranged as two groups of electrical conductors respectively connected to the second and third printed circuit boards for delivering the power from the power supply to the drive electronics and printhead integrated circuits via the electrical connector at respective ends of the printhead assembly, respective ones of electrical conductors of the two groups of electrical conductors being connected together at abutting regions intermediate the ends of the printhead assembly.
8. A printhead assembly according to claim 7, wherein the abutting regions of the individual electrical conductors are arranged in overlapping relationship.
9. A printhead assembly according to claim 1, wherein:
the at least one printhead module is formed as a unitary arrangement of the at least two printhead integrated circuits, the support member, the electrical connector, and at least one fluid distribution member mounting the at least two printhead integrated circuits to the support member; and
the support member has at least one longitudinally extending channel for carrying the printing fluid for the printhead integrated circuits and includes a plurality of apertures extending through a wall of the support member arranged so as to direct the printing fluid from the at least one channel to associated nozzles in both, or if more than two, all of the printhead integrated circuits by way of respective ones of the fluid distribution members.